1 2 The fact that many customers also have a wireless phone simply means the 3 service is popular; it does not mean that it is a substitute for wireline service. As 4 the Chairman of SBC, BellSouth's partner in Cingular, observed about wireless: 5 6 It's not going to displace the wire-line network. It's certainly 7 going to be a big product, but it's never going to be the substitute. Reliability is one reason. 30 8 9 10 Q. BellSouth also claims that "voice over internet protocol" (VoIP) is a competitive alternative to local phone service. 31 Do you agree? 11 12 13 A. No. As a practical matter, claiming that VoIP based telephony is a viable 14 competitive alternative today places the cart before the foal. VoIP-based services 15 are only just now being introduced and the extent to which they will be embraced 16 is very much unknown. There are a number of critical limiting factors to the 17 emergence of VoIP, most specifically that the predicate to VoIP service is the 18 customer having a high-speed data connection. By itself this limits the 19 addressable market to only those customers desiring a high-speed connection. 20 21 It is far too simplistic to assume that all customers are going to want a high speed data connection - or that all customers that have a high-speed data connection 22

A Wireless World, Business Week, October 27, 2003, page 111.

Ruscilli Direct, pages 12 to 15.

desire VoIP based telecom services. A VoIP-driven marketplace is not an 1 inevitability that Commission's can count on, any more than "picture phones" 2 3 were inevitable, even though they were widely touted at the 1964 World's Fair. 4 5 Q. Do the data help show the potential limits of VoIP technology? 6 7 Yes. As part of its testimony, BellSouth sponsored the results from a consumer A. survey conducted by the Glover Group. 32 The survey claims that 27% of the 8 residential households in its territory have a high-speed Internet connection,³³ 9 which is the prerequisite for VoIP service. Significantly, however, the survey 10 shows that this prerequisite is not uniformly available across the residential 11 market: rather, it is heavily concentrated in households with high incomes. VoIP, 12 even if it were real, is not a mass market alternative, because the mass market 13 14 itself is not yet positioned for VoIP based services.

Table 6: Penetration of High-Speed Internet Access

C	Household Income			
Competitive Measure	<\$25K	\$25-\$50k	\$50-75K	>\$75K
Percentage of Households with	8%	17%	35%	56%
High Speed Internet	13%		46%	

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Ruscilli Direct, Exhibit JAR-2.

Glover Study, Question 6. The Glover Study's estimate that 27% of North Carolina's households have high-speed Internet access (said differently, nearly 34's of the households do not) may overstate penetration. The FCC's biannual report on broadband access suggests that 22% a penetration rate of 22%.

Based on the Glover Study, even if VoIP service did become a competitive alternative to local phone service, it would provide an option to only the highest income households in North Carolina. Only 13% of those households with annual incomes up to \$50K per year have high-speed access. According to the Census Bureau, the median household income in North Carolina is only \$38K per year. The Consequently, VoIP based forms of competition — even if they were to grow to become a meaningful alternative — would offer a competitive alternative only to a narrow segment of the North Carolina market.

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The addressable VoIP market is even more skewed towards higher income households when only cable-based Internet connections are considered. Because most DSL-based Internet connections are bundled with local phone service, it is not reasonable to consider them part of a VoIP-addressable phone market. After all, why would a consumer want a VoIP-based local alternative, when it is already getting local service alongside its DSL service?

Table 7: Penetration of High-Speed Internet Access (Not Including DSL-Based Connections)

Competitive Measure	Household Income			
Competitive Measure	<\$25K	\$25-\$50k	\$50-75K	>\$75K
Percentage of Households with	3%	8%	25%	38%
High Speed Internet	6%		31%	

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Q. Is the competition that BellSouth seeks to eliminate so focused on the highest-

income households?

http://www.census.gov/hhes/income/income03/statemhi.html.

A. No. To the contrary, the Glover Study shows that competitive activity today is

broadly benefiting residential customers and bears virtually no relationship to

household income. In fact, if there is any trend, it is that CLPs have been more

successful in lower-income households (although the variation is within the

Table 8: Competitive Share by Household Income³⁵

Competitive		Household Income				
Measure	Average	<\$25K	\$25-\$50k	\$50-75K	>\$75K	
CLP Market Share	15%	18%	15%	12%	12%	

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For all practical purposes, the existing level of mass market competition – competition that, for all practical purposes, is dependent upon access to UNE-P – is uniformly benefiting customers without regard to income.

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Q. What lessons can be drawn from the Glover study?

study's 2.7% margin of error).

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A. First, there is no meaningful VoIP today in the residential market, ³⁶ nor is there any indication that wireless is today a substitute for wireline phone service. Thus, BellSouth's assertions regarding intermodal competition are not substantiated by

³⁵ Glover Park Study (Q3).

Although the Glover Study reported that 7% responded that they had "voice over the Internet," none named a VoIP provider as their local telephone company. As a result, it is more likely that this response indicates confusion more than anything else. For instance, it is easy to understand a technologically unsophisticated customer responding that yes, they have voice over the Internet – it says "you have mail."

its own survey. Phone service is still phone service in the residential market -- on 1 2 average, twice as many people make a local phone call each day than send an email – a fact that is true across all age groups and genders.³⁷ 3 4 5 Perhaps more importantly, however, is what the Glover Park study reveals with respect to how VoIP competition might develop in the future. The fact is that the 6 fundamental precondition to VoIP-based competition - high-speed Internet access 7 - is concentrated among high-income households, which form a relatively narrow 8 segment of the market.³⁸ Thus, UNE-P based competition is broad, while even 9 the promise of VoIP-based competition is narrow. VoIP cannot be a mass market 10 alternative to UNE-based competition because the VoIP-addressable market itself 11 represents a much narrower customer segment. 12 13 Is there reason to conclude that competition in the small business segments is Q. 14 similarly dependent upon access to UNEs? 15 16 Yes. A recent study by the Small Business Administration indicates that less than 17 A. half of the small businesses have high-speed Internet access, with only 4% 18

Glover Park Study (Q18).

Notably, there is considerable overlap between households with high-speed internet access and wireless phones, with more than 80% of the high-speed internet households also having wireless service.

1		connecting through a DS-1 connection. ³⁹ The fact is that there remains a POTS
2		market of users interested in phone service, but not requiring the high-speed data
3		connections necessary for VoIP (even assuming that VoIP would otherwise prove
4		a substitute).
5		
6 7		III. The Implications of North Carolina's Competitive Conditions on Price Cap Regulation
8		
9	Q.	What do the competitive facts discussed above suggest with respect to
10		BellSouth's request for additional deregulation?
11		
12	A.	Fundamentally, BellSouth has failed to demonstrate that it faces any meaningful
13		competition, except through UNE-based forms of entry. The alternatives to
14		which it points - wireless and VoIP - are not effective substitutes, as BellSouth's
15		own pleading (with respect to wireless) acknowledges, and its own customer
16		survey shows.
17		
18		Given the virtually complete dependency of local competition on UNE-based
19		forms of competition, it would be wrong for the Commission to grant BellSouth
20		any additional pricing flexibility without parallel actions that assure continued
21		UNE availability at reasonable rates.

 $^{^{39}}$ $\,$ A Survey of Small Businesses' Telecommunications Use and Spending, SBA Office of Advocacy, March 2004, page 44.

1		
2	Q.	What would be the consequences of the premature deregulation requested by
3		BellSouth?
4		
5	A.	There would be a number of consequences to granting BellSouth the relief that it
6		seeks. First, if BellSouth were to succeed in eliminating UNE-P and high-
7		capacity loops, there would be an immediate and dramatic reduction in
8		competition. For all practical purposes, most customer segments would have no
9		competitive alternative to BellSouth, which would be positioned to increase its
10		rates to the maximum extent permitted under the plan.
11		
12		Even if one assumes that VoIP and CLP facilities are capable of serving some
13		customers, the majority of customers would remain captive to the BellSouth
14		monopoly. If confronted with the circumstance in which some customers have
15		competitive choice while most do not, BellSouth would increase rates to the
16		captive base while reducing rates selectively to only those customers who (for
17		whatever reason) enjoy limited choice. As such, granting BellSouth's request
18		would violate Section 62-133.5's requirement that the plan "not unreasonably
19	٠	prejudice any class of telephone customer."
20		
21		Moreover, the Commission has already seen what occurs once BellSouth obtains
22		the relief that it seeks. In order to obtain §271 authority, BellSouth proudly

pointed to UNE-entry as evidence that its markets were irreversibly open to

23

competition. Having obtained the authority, however, BellSouth has shown equal 1 zeal towards eliminating these same forms of entry. 2 3 The Commission should expect nothing different here. BellSouth continues to 4 point to forms of entry that it seeks to eliminate as evidence of competition. It 5 cannot find mass market competition other than that supported by UNE-P, so it 6 claims that new technologies will fill the void. Once BellSouth enjoys (what will 7 effectively be) deregulation, the Commission can expect that BellSouth will turn 8 its attention to the final elimination of the nascent competition that remains. 9 10 BellSouth claims that CLPs have alternatives to UNE-P; specifically, resale, 11 Q. self-provisioning and BellSouth's "voluntary" Wholesale Service. 40 Is any of 12 this plausible? 13 14 No. First, there is little question that resale is not economically viable. Resale 15 A. volume in North Carolina peaked in 2000 (with a trivial 2.7% share) and has 16 fallen by roughly 60% through the end of 2003. 17 18 With respect to self-provisioning, the data gathered in the North Carolina TRO 19 proceeding demonstrated that mass-market UNE-L activity is de minimis, with a 20 geographic profile far different (and more narrow) than that achieved by UNE-P. 21

Tipton Direct, page 3.

Although the carrier-specific information in that proceeding was confidential, the 1 2 summary conclusions are not: 3 4 Two facts are clear First, no matter which data source is used 5 to quantify the UNE-L activity of BellSouth's claimed trigger CLPs, the activity is trivial (generally ranging from 0.0% to 0.3%), 6 7 with the largest purchaser of analog loops explaining it is no longer pursuing the strategy. Second, the activity is in broad decline, 8 whether viewed in the aggregate or by individual CLP. UNE-L 9 activity is insignificant and shrinking.⁴¹ 10 11 12 Moreover, the TRO case data demonstrated the very different geographic profiles achieved by UNE-P and UNE-L in the mass market. Exhibit JPG-1 to this 13 declaration (which was filed in the TRO proceeding as JPG-5) compares the 14 15 competitive lines added by UNE-P and UNE-L, by wire center, throughout the state of North Carolina over the most recent six months for which data are 16 available. 42 This exhibit best compares the level and geographic reach of the local 17 competition currently underway in North Carolina through UNE-L (loops without 18 switching) and UNE-P (loops with switching). As JPG-1 shows, mass market 19 competition in North Carolina is critically dependent upon UNE-P. 20 21 Has BellSouth provided any evidence that wholesale alternatives exist in Q. 22 North Carolina? 23

Surrebuttal Testimony of Joseph Gillan, Docket No. P-100, Sub 133q, page 15.

Source: BellSouth Response to CompSouth No. 3 and AT&T No. 56, Docket No. P-100, Sub 133q.

A. No. In fact, BellSouth's TRO testimony acknowledged that there are no
wholesale providers of local switching in North Carolina for mass market
customers. The lack of competition is confirmed by the monopoly pricing of
BellSouth's "Wholesale DSO" offer, which would increase the rate for local

switching to more than \$9 per month, an increase of over 1000% above cost. 43 In

addition, BellSouth would impose an additional \$3.40 per month for vertical

features, nearly twice the cost-based rate. Such pricing is obviously designed to

9 curtail competition, not promote it. 44

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Q. Is the situation just as tenuous for competition in the enterprise market?

13 A. Yes. The other form of UNE-based competition growing in North Carolina is

14 competition for larger business customers desiring integrated packages of voice

and data using a DS-1 connection. DS-1 UNE loops (including loops that are

obtained in an EEL configuration) have grown by 98% over the past 2 years and

are central to competition in this market.⁴⁵

The Commission recently established the cost-based rate for a local switching port at \$0.82.

Moreover, the Commission should review BellSouth Proprietary Response to AT&T Item 24 to judge for itself the "market reaction" to BellSouth's proposed "market offer."

BellSouth Response to AT&T Item No. 8.

Similar to its positions regarding UNE-P, however, BellSouth is attempting to impose substantial rate increases on competitors in this marketplace as well.

Specifically, BellSouth is attempting to eliminate its §251 unbundling obligations for high-capacity loops, intending to impose its much higher special access rates on competitors. As shown in the following table, BellSouth seeks to impose dramatically higher rates on its wholesale customers – rates that would unquestionably reduce competition.

Table 9: BellSouth's Wholesale Pricing Proposal --Enterprise Market

Element	Cost-Based UNE Rate	Special Access Rate	Increase
DS-1 Loop ⁴⁶	\$63.77	\$168.00	163%
Transport ⁴⁷	\$33.13	\$235.00	609%
EEL (Loop/Transport)	\$96.90	\$403.00	316%

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Q. What do you recommend?

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A. First, based on the lack of non-UNE competitive activity in North Carolina,

BellSouth should not be granted any additional pricing freedom. Without

continued access to UNEs as stable and reasonable prices, even the relatively

modest levels of competitive activity that exist today will disappear.

15

DS-1 loop rates are for Zone 1.

⁴⁷ Assumes 10 miles of interoffice transport.

1 I do not, however, end my analysis with the recommendation that BellSouth's 2 current proposal be rejected. Rather, I discuss how it could be modified to make 3 it more consistent with the intent of North Carolina law and the Commission's 4 objectives. 5 Specifically, I recommend that the Commission require that, if BellSouth chooses 6 to re-file for increased flexibility in the future, it should include within its price 7 regulation plan a separate UNE category to govern changes in UNE rates (as well 8 9 as terms and conditions). If BellSouth's UNE obligations can be made stable through its state-level price cap commitments - and after any litigation cycle has 10 11 expired or BellSouth has stipulated to Commission jurisdiction - then additional 12 retail flexibility may be warranted. 13 Do you believe that the North Carolina Commission has oversight authority 14 Q. sufficient to require inclusion of UNE prices in a price cap plan? 15 16 Yes. Under the Act, it is the state commission that is fundamentally charged with 17 A. the responsibility to assure that rates for network elements, whether offered under 18 §251 or §271, are just and reasonable. My understanding is that BellSouth 19 acknowledges the Commission's jurisdiction to determine rates for network 20

1 elements that it offers under §251, but that it will not respect that authority for network elements offered under §271.48 2 3 4 I do not intend to debate this issue to any significant degree here, as the question 5 is essentially a legal one that will be decided in its own time. I note, however, that the central foundation for the CLP's position – namely, that RBOCs must 6 offer §271 network elements through interconnection agreements that states are 7 8 responsible for arbitrating - has recently been embraced by a federal judge reviewing Qwest's obligations in Minnesota. In discussing Qwest's obligations to 9 10 file all of its agreements, the judge noted: 11 For example, §271 includes a comprehensive checklist of items 12 that must be included in ICAs before an ILEC may receive 13 authority to provide regional long distance service. This list 14 reveals that any agreement containing a checklist term must be 15 filed as an ICA under the Act. 49 16 17 As a practical matter, my recommendation is that the Commission cannot assure 18 that a relaxation of BellSouth's price regulation plan satisfies the standards of 19 Section 62.135.5 unless it can be assured that CLPs have access to the UNEs that 20 21 underlie local competition at just and reasonable prices. This either requires that (1) BellSouth recognize the Commission's authority in this area, or that (2) the 22

Tipton Direct, page 8.

Memorandum Opinion and Order, Civil No. 03-3476, Qwest Corporation v. the Minnesota Public Utilities Commission, et. al., August 25, 2004.

1 Commission delays implementing any retail-level flexibility until (and unless) the 2 wholesale components of a revised plan have survived final judicial review. 3 What should be the basic elements of the wholesale-price regulation plan? 4 Q. 5 I recommend that the Commission establish a wholesale plan with two service 6 Α. 7 categories for the following §271 UNE elements (assuming that, at least under some circumstances, BellSouth is not required to offer these elements under §251 8 of the Act):⁵⁰ (1) local switching (and associated elements),⁵¹ and (2) high-9 10 capacity loops and transport. In addition, I recommend that terminating switched 11 access be placed in a third category. 12 Q. What pricing rules should apply to the §271 service categories? 13 14 15 A. Individual rates in the §271 service category should be initialized at the existing §251 rate, plus or minus 10%. The FCC requires that rates for §271 elements be 16 "just and reasonable," nondiscriminatory and provide meaningful access.⁵² 17

I want to make clear that identifying these elements as potentially being excluded from §251 does not mean that I would agree with a finding of non-impairment under present conditions. However, given the uncertainty surrounding these UNEs, and their absolute importance to local competition in North Carolina, BellSouth's price cap plan must address (at a minimum) continuing rate stability for these wholesale services before any relaxed retail regulation can be considered.

Other elements used in combination with local switching are shared transport, signaling and billing information.

As explained by the FCC in the TRO, \P 663 (footnotes omitted):

Because the TELRIC rates for elements required under §251 are also required to be just and reasonable, ⁵³ the most reasonable starting point for §271 rates in a price cap regime would be a range that has as its center point the existing just and reasonable rate, with a reasonable cap and floor to assure that any new rate remains just and reasonable. Although the case could be made that the initial rates for §271 rates should be set equal to their TELRIC levels, a reasonable degree of pricing flexibility (+/-10%) would be consistent with a price cap regulatory structure.

On a going forward basis, individual rate caps should be permitted to increase and/or decrease according to the GDP-PI (i.e., the Gross Domestic Price Index) less whatever productivity offset that the Commission adopts. This is same structure as BellSouth's initial price cap plan and it is reasonable to extend it here to wholesale services. Further, there is no reason to provide BellSouth any additional flexibility for individual rate elements. Unlike the prior flexibility

Thus, the pricing of checklist network elements that do not satisfy the unbundling standards in section 251(d)(2) are reviewed utilizing the basic just, reasonable, and nondiscriminatory rate standard of sections 201 and 202 that is fundamental to common carrier regulation that has historically been applied under most federal and state statutes, including (for interstate services) the Communications Act. Application of the just and reasonable and nondiscriminatory pricing standard of sections 201 and 202 advances Congress's intent that Bell companies provide meaningful access to network elements. (emphasis added)

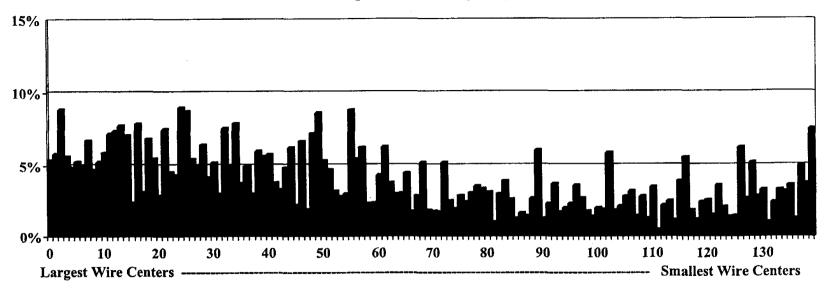
granted for retail services, there is no "cross-subsidization" that the Commission

Specifically, section 252(d) PRICING STANDARDS (which the FCC has interpreted as requiring the use of TELRIC-based rates) requires that rates for network elements offered under §251 must be just and reasonable.

1 should grant BellSouth the flexibility to phase-out (which was the justification for 2 granting rate-element flexibility). UNE rates are cost-based and the price cap 3 plan should be designed to retain that basic cost-based structure, not to promote 4 non-cost deviations. 5 6 Q, What pricing rule should apply to the intrastate access category? 7 8 Unlike UNEs, existing intrastate access rates are not cost-based. Given the A. 9 critical importance of access to competition-particularly in an environment where BellSouth is becoming the dominant provider of toll service – access rates 10 need to be initialized at cost. 11 12 The need for cost-based terminating access is a direct result of BellSouth's 13 14 dominant local market share. Because of BellSouth's local monopoly, a larger portion of its toll calls will terminate with one of its own customers than will be 15 true for any other non-ILEC toll provider. Consequently, the effective cost for 16 17 BellSouth to terminate a toll call will be its incremental costs. Access fees are only relevant to BellSouth for the portion of its long distance traffic that 18 terminates with the subscribers of other LECs. 19 20 In order for any other long distance provider to compete with BellSouth, it must 21 be able to terminate its toll calls at the same effective cost as BellSouth. That 22 condition can only be satisfied if intrastate access rates are based on cost. 23

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2	Q.	If BellSouth re-filed its price regulation plan with a the wholesale categories
3		and individual element rate caps you suggest here, do you believe that
4		additional pricing flexibility would be warranted?
5		
6	A.	As a general matter, yes. Of course, a specific recommendation would depend
7		upon the details of any such plan and competitive conditions at the time. It is not
8		mere retail flexibility that I oppose, it is retail pricing flexibility in the absence of
9		retail competition. For the foreseeable future, retail competition will depend upon
10		wholesale offerings, and a price cap plan that assures stable wholesale
11		arrangements is a critical prerequisite to additional retail flexibility.
12		
13	Q.	Does this conclude your direct testimony?
14		
15	Α.	Yes.

Competitive Profile of UNE-P Past 6 Months – BellSouth in North Carolina Lines Added April 2003 through September 2003



Competitive Profile of UNE-L Past 6 Months - BellSouth in North Carolina

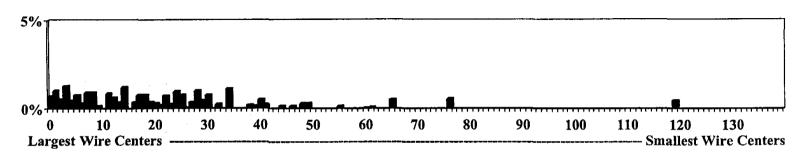


EXHIBIT 19

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Commission's own motion to)	
facilitate the implementation of the Federal)	Docket No. U-13796
Communication Commission's Triennial Review)	
Determination in Michigan.)	Filed: March 5, 2004

SURREBUTTAL (THIRD ROUND) TESTIMONY OF

JOSEPH GILLAN

ON BEHALF OF

AT&T COMMUNICATIONS OF MICHIGAN, INC. and TCG DETROIT

MARCH 5, 2004

1

Case No. U-13796

Surrebuttal Testimony of Joseph Gillan on behalf of AT&T Communications Michigan Inc. and TCG Detroit

March 5, 2004

1		Attached to this testimony is the actual study cited by the FCC (Table 4 of Exhibit
2		JPG-5), which revealed that enterprise CLECs generally served 80% to 90% of
3		their customers over digital facilities.
4		
5		The TRO did not demand perfection from its enterprise CLECs. It recognizes
6		that carriers (and their switches) should be characterized by the core of their
7		operations, and that carriers focusing on the enterprise market are not to be
8		counted merely because an enterprise-oriented CLEC is serving some analog
9		(which is to say, mass market) lines. Customers will demand fax lines, and even
10		the largest digital customer is likely to have some analog locations. The presence
11		of such locations (and lines), however, does not change the basic nature of the
12		CLEC. The TRO is clear: Enterprise switches do not count as mass market
13		switch triggers.
14		
15	Q.	Have you analyzed the loop-purchasing pattern of the named trigger
16		candidates to determine whether the claimed trigger companies should be
17		considered enterprise or mass market providers?
18		
19	A.	Yes. In a response to discovery produce after the submission of my rebuttal
20		testimony,10 SBC Michigan provided the types of UNE-L connections (analog and

SBC Michigan Response to the First Set of Discovery Requests by ACN Telecommunications, Inc., Z-Tel Telecommunications and TalkAmerica Telecommunications

Case No. U-13796

Surrebuttal Testimony of Joseph Gillan on behalf of AT&T Communications Michigan Inc. and TCG Detroit

March 5, 2004

DS-1) being used by its claimed trigger candidates during 2003. While the highly sensitive confidential information is provided in Exhibit JPG-6 (attached), the relevant summary statistics are produced in the table below:

Table 1: Current UNE-L Activity

Claimed Trigger	2003	% Enterprise	
Candidate	Analog	Digital	(2003)11
CLEC A	-14%	2100%	100%
CLEC B	-19%	182%	100%
CLEC C	-2%	32%	100%
CLEC D	-30%	-15%	N/A
CLEC E	-9%	73%	100%
CLEC F	-6%	74%	100%
CLEC G	-12%	315%	100%
CLEC H	19%	291%	84%
CLEC I	-27%	-3%	N/A
CLEC J	-3%	136%	100%

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The most accurate view of a CLEC's basic classification (i.e., should the CLEC be considered a mass market or enterprise CLEC) should evaluate its current (and not legacy) operations. As Table 1 shows, even those CLECs that may have had an historic interest in analog service have essentially shifted to an enterprise mode. Analog activity is in broad decline, while the lease of high-speed digital facilities is increasing rapidly. These CLECs simply are not legitimate trigger candidates for the self-provisioning mass market switch triggers because each is today "actively providing" enterprise services rather than mass market.

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Inc., CLEC Request 2.10 (dated March 1, 2004).

Measures the percentage of lines added in 2003 that are enterprise (i.e., DS-1).

EXHIBIT 20

Page 1 of 2 Summary of Analog/Digital Activity on Switches of Claimed Mass Market Switch Triggers

Relevant Percentage of Switch Connected to Analog v. Digital Capacity (VGE)

Claimed	State	Montrot	UNE-1	L Type
Trigger ¹	State	Market	Analog	Digital
A	Texas	Austin	0%	100%
A	Texas	Corpus Christie	0%	99%
A	Texas	Dallas	0%	99%
A	Texas	Houston	0%	99%
A	Texas	San Antonio	0%	99%
В	Texas	Corpus Christie	9%	99%
C	Texas	Austin	1%	99%
С	Texas	Dallas	0%	100%
С	Texas	Houston	2%	98%
D	Texas	Austin	4%	96%
D	Texas	Dallas	0%	100%
D	Texas	Houston	0%	100%
D	Texas	San Antonio	8%	92%
Е	AL	Anniston	5%	95%
E	AL	Birmingham	6%	94%
Е	AL	Montgomery	4%	96%
F	AL	Not Specified	5%	95%
G	AL	Not Specified	0%	100%
Н	AL	Not Specified	3%	97%
I	GA	Atlanta	10%	90%
J	GA	Not Specified	0%	100%
K	GA	Atlanta	1%	99%
L	GA	Atlanta	10%	90%
M	LA	Gulfport	4%	96%
N	LA	Not Specified	7%	93%
0	LA	Not Specified	0%	100%
P	LA	Not Specified	2%	98%
Q	NC	Greensboro	1%	99%
Q	NC	Charlotte	1%	99%
R	NC	Charlotte	11%	89%
S	NC	Raleigh	16%	84%

Note: Claimed trigger carrier is masked. Each state is assigned a separate code, even if a carrier is named as a switch trigger in multiple state.

Page 1 of 2 Summary of Analog/Digital Activity on Switches of Claimed Mass Market Switch Triggers

Relevant Percentage of Switch Connected to Analog v. Digital Capacity (VGE)

			UNE-L	Туре
S	NC	Greensboro	14%	86%
S	NC	Charlotte	27%	73%
S	NC	Wilmington	14%	86%
S	NC	Columbia SC	3%	97%
T	NC	Not Specified	8%	92%
U	NC	Not Specified	0%	100%
V	NC	Greensboro	3%	97%
W	SC	Columbia	3%	97%
W	SC	Greenville	15%	85%
W	SC	Columbia	8%	92%
W	SC	Charleston	14%	86%
X	SC	Not Specified	3%	97%
Y	SC	Greenville	4%	96%
Z	TN	Chattanooga	14%	86%
AA	TN	Not Specified	6%	94%
AB	TN	Not Specified	0%	100%
AC	FL	Pensacola	12%	88%
AC	FL	Daytona Beach	16%	84%
AC	FL	Melbourne	9%	91%
AD	FL	Miami	0%	100%
AD	FL	Jacksonville	0%	100%
AE	FL	Not Specified	8%	92%
AF	FL	Not Specified	0%	100%
AG	FL	Jacksonville	0%	100%
AG	FL	Pensacola	4%	96%